# STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

# **STAFF REPORT FOR JULY 8, 2004**

Prepared June 18, 2004

ITEM: 3

SUBJECT: Proposed Conditional Waiver of Waste Discharge Requirements for

Discharges from Irrigated Lands in the Central Coast Region (Region 3)

### **SUMMARY**

In 1999 California Water Code section 13269 was amended, causing all waivers of waste discharge requirements (WDRs) that existed on January 1, 2000, to expire on January 1, 2003. Two Region 3 waivers applicable to irrigated agriculture, one for irrigation return water and the other for non-NPDES stormwater discharges, have now expired and must be replaced. In the years since the adoption of the original waivers in 1983, water quality in Region 3's agricultural areas has been shown to be impaired by such constituents as pesticides and nutrients, lending further urgency to the need to adopt additional requirements for irrigated operations.

The goal of the conditional waiver program is to ensure that all farm operations are actively protecting water quality, that water quality objectives are being met, and that beneficial uses of water are protected or restored.

The proposed waiver has the following conditions:

- Completion of 15 hours of farm water quality training
- Development of a farm water quality management plan that addresses, at a minimum, irrigation management, nutrient management, pesticide management and erosion control
- Implementation of management practices identified in the plan
- Submittal of a Notice of Intent and periodic progress reports
- Performance of water quality monitoring
- Compliance with Basin Plan requirements and water quality standards

The Regional Board held three workshops to receive public input on the proposed conditional waiver. Workshops were held in Santa Barbara (October 23, 2003), Salinas (January 9, 2004), and San Luis Obispo (February 5, 2004). Comments received for the February workshop are included in Attachment 6 along with staff responses.

Regional Board staff completed a draft Negative Declaration for the proposed project under the California Environmental Quality Act (CEQA) which was released for public comment on March 22, 2004. A copy of the Initial Study and Negative Declaration is included as Attachment 1. A Resolution adopting the Negative Study is included as Attachment 2. The proposed Conditional Waiver and proposed Monitoring and Reporting Program are included as Attachments 3 and 4. Monitoring scenarios and estimated costs are included in Attachment 5. Comments received on the Initial Study and Negative Declaration, the proposed Conditional Waiver and proposed Monitoring and Reporting Program are included in Attachment 6, along with staff's responses. Comment letters received are included in Attachment 7. All attachments will be posted on the Regional Board's website

(www.swrcb.ca.gov/rwqcb3/AGWaivers/

Index.htm) and available in hard copy by contacting Alison Jones at (805) 542-4646.

#### **BACKGROUND**

**Agriculture in the Central Coast Region** 

Irrigated agriculture is a major land use in the Central Coast Region, encompassing approximately 600,000 acres. More than 100 different crops are grown and agricultural activities take place year round. Major crops include vegetable crops (such as lettuce, broccoli, cauliflower, celery, cabbage and spinach), fruits (such as strawberries and wine grapes), cut flowers, and potted plants. Other crops include artichokes, raspberries, asparagus, carrots, onions, snap peas, and many more.

There are about 2500 agricultural operations in the region that could be enrolled under this program, and they range in size from less than ten acres to more than 2000; however, approximately two-thirds of all operations are less than fifty acres. About one-third are less than ten acres. Fewer than 200 operations (less than 8%) exceed 2000 acres.

Irrigated agriculture is concentrated in several major drainages, including the Salinas Valley and upper Salinas watershed, the Pajaro Valley, the lower Santa Maria River, the Santa Ynez watershed and the Santa Barbara coastal area. Irrigated farmland is found in numerous small drainages throughout the region, as well.

A number of factors combine to make agriculture in this region unique. In general, farming is on a smaller scale than in the Central or Imperial Valleys. The Central Coast climate is unique in California and comprises a "niche" in the agricultural industry that distinguishes Central Coast farm products from other areas. As mentioned above, the majority of operations are less than 50 acres. There are no large irrigation districts since most operations use groundwater as their water source. Many properties have been held in families for generations and are leased out rather than farmed by the owner. The area is considered highly desirable, and growth pressures drive up the price of agricultural rents. There is a mixture of owned and leased lands and many operators own some farms and lease others. Leases can be either short or long term (one year or more than five years), resulting in varying incentive by leaseholders to implement water quality protection.

Crop prices are primarily controlled by the existing market structure. Consolidation in the food industry has resulted in a smaller group of buyers, giving corporate retailers more bargaining power. In addition, local farmers often compete with products from other countries, where the costs of production may be substantially less. The result is that growers often have little control over the price they are paid even though the costs of producing and delivering products continues to rise. Additionally, issues of food safety are increasingly dictating practices growers must use in order to sell crops, and some recommended food safety practices may run counter to water quality protection practices. Because of these and other factors, the agricultural industry is extremely sensitive to cost increases and management practice requirements.

# Water Quality in Agricultural Areas

Over the past five years, the Regional Board's Central Coast Ambient Monitoring Program (CCAMP) has provided information to characterize water quality, support waterbody beneficial use determinations, support waterbody listings for impairment, and to evaluate regional priorities.

CCAMP data, as well as other data sources, have shown that waterbodies in areas of intensive agriculture often have high levels of nutrients. For example, nitrate in some surface waters is present at levels far in excess of the drinking water standard of 10 mg/L as N (nitrogen). Persistent toxicity has also been documented in some areas of intensive agricultural operations, with its cause being traced to currently applied pesticides. Of approximately 175 surface waterbodies that are on the Central Coast Region's 2002 Clean Water Act Section 303(d) list of impaired waters, about 75 identify agriculture as a potential source. In addition, many groundwater basins underlying agricultural areas in the Central Coast Region show elevated nitrate concentrations, in many cases well over the drinking water standard.

# **Existing Efforts by the Agricultural Industry to Address Water Quality Issues**

The Central Coast Region has benefited from the proactive approach taken by several segments of the agricultural industry. Notable examples include the Agricultural Water Quality Program of the Coalition of Central Coast County Farm Bureaus (Farm Bureau Coalition) and efforts to promote sustainable wine growing practices by the Central Coast Vineyard Team and the Central Coast Winegrowers Association. Efforts are also underway to promote sustainable practices by Spanish-speaking farmers through the Rural Development Center and the Agricultural Land-

Based Training Association (ALBA) in Monterey County.

The Farm Bureau Coalition has been working to address agricultural water quality impacts in areas that drain to the Monterey Bay National Marine Sanctuary, which represents approximately twothirds of the region. This is a broadly supported cooperative effort that is implementing the Sanctuary's Plan for Agriculture and Rural Lands. The Sanctuary Plan was developed in cooperation with the California State Farm Bureau Federation and the Coalition of Central Coast County Farm Bureaus, the Regional Board and numerous other partners, including University of California Cooperative Extension, the Natural Resource Conservation Service and local Resource Conservation Districts.

Key components of the Sanctuary Plan implementation strategy include formation of grower working groups, and development and implementation of farm water quality management plans. Technical assistance is provided by Farm Bureau watershed coordinators active in each county, as well as all of the other partners listed above. Farm Bureau watershed coordinators provide the Regional Board with annual reports summarizing practice implementation and selfmonitoring results by grower watershed working groups.

A small but significant (and increasing) percentage of growers on the Central Coast are participating in this program. As of March 2004, there were 17 active grower working groups and another 17 in the process of organizing. Staff estimates that active participants represent approximately 10-15% of operations in the region. Participants are often industry leaders who have chosen to be proactive in addressing water quality concerns.

Another industry-led effort has been underway for several years to promote sustainable practices by wine grape growers. There are approximately 100,000 acres of grapes in the Central Coast. Most vineyards are irrigated, so grapes are grown on about 16% of the irrigated croplands in the region. Many of the growers have undertaken an evaluation process to assess irrigation, nutrient management, pest management, and erosion control practices through the Positive Point System developed by the Central Coast Vineyard Team (CCVT). CCVT estimates that approximately 75-100 operations

have completed evaluations and are using them to evaluate management practices and identify opportunities for improvement It is still too early to determine if these efforts are having a positive impact on water quality, but the waiver monitoring program should help determine whether such efforts, done on a large scale, can improve water quality over time.

# **Regulatory Requirements**

Although discharges from irrigated agriculture are exempt from regulation through the National Pollutant Discharge Elimination System (NPDES) permit program of the federal Clean Water Act, they are not exempt from state law. Any discharge from irrigated agricultural activities to surface water or to land, that impacts or could impact water quality, is subject to regulation under the California Water Code (CWC).

CWC Section 13260 requires persons who are discharging or who propose to discharge waste where it could impact the quality of waters of the State to submit a Report of Waste Discharge. The Regional Board uses the Report of Waste Discharge in preparing Waste Discharge Requirements that regulate the discharges of waste in compliance with the CWC and other applicable laws and regulations. The purpose of this regulatory program is to protect the beneficial uses of the waters of the State.

CWC Section 13269 authorizes the Regional Board to waive Waste Discharge Requirements for a specific discharge or specific type of discharge if the waiver is in the public interest. The waiver must be conditional and may be terminated at any time. The Regional Board may also waive the requirement to submit a Report of Waste Discharge. In 1999, Senate Bill 390 amended CWC Section 13269. CWC Section 13269 now specifies that all waivers in effect on January 1, 2000, were terminated on January 1, 2003, unless renewed following a hearing. Waivers expire after five years unless renewed by the Board after appropriate review.

In 1983, the Regional Board approved a list of categories of discharge for which waste discharge requirements could be waived, including discharge of irrigation return flows (tailwater)

and non-NPDES stormwater runoff. When waivers for discharges from irrigated agriculture were adopted in 1983, little was known about the potential impacts of irrigation tail water and other runoff or the magnitude of groundwater impacts from the use of inorganic fertilizers. Regional Board regulatory effort at that time was largely focused on addressing point source discharges such as wastewater treatment plants and industrial dischargers, and cleanups from spills and leaks. The 1983 waivers pertaining to irrigated agriculture were not renewed before January 1, 2003, and have now terminated.

In 1987, Section 319 was added to the Clean Water Act to address nonpoint source pollution, and subsequently the State of California adopted its Nonpoint Source Program in 1988. Although staff resources to implement the program were extremely limited, the Regional Board began to work with agriculture through the Nonpoint Source (NPS) Program and later the State's Watershed Management Initiative. Since the inception of the NPS program, the Regional Board's emphasis in working with agriculture has been on encouraging proactive efforts to address water quality concerns, and supporting such cooperative partnerships as Monterey Marine Sanctuary's National Plan Agriculture. The Regional Board has directed grant funding toward increasing educational outreach, and has encouraged efforts toward selfdetermined compliance with water quality regulations through promotion of ranch and farm water quality management planning short courses throughout the region.

The State's NPS Plan identifies waivers as an appropriate regulatory tool available to protect water quality from NPS pollution, recognizing the challenges involved in regulating a large number of individual dischargers.

The State recently adopted an updated policy for implementing the NPS Plan, which identifies five key elements that must be included in NPS management plans. Those elements are:

Element 1: Goal and purpose

Element 2: Description of practices to be implemented and process used to select, verify and ensure practice implementation

Element 3: Time schedule and milestones

Element 4: Feedback mechanisms

Element 5: Consequences of failure

Although the revised policy will not become effective until approved by the Office of Administrative Law, the proposed conditional waiver program will incorporate the key elements into program implementation as described below.

# DEVELOPING A NEW REGULATORY PROGRAM

Staff followed an evolving process in developing the proposed conditional waiver. In the fall of 2002, lead staff met with other Regional Board staff from both regulatory and nonregulatory programs to gather input and discuss the most appropriate approach for replacing expired agricultural discharge waivers. Staff discussed three options:

- allowing the waivers to expire and continuing to work with agriculture through existing voluntary efforts such as the Sanctuary program, the Central Coast Vineyard Team and other proactive efforts;
- 2) developing a new conditional waiver that was designed to build on the existing efforts; or
- 3) developing general or individual Waste Discharge Requirements.

After considerable discussion, lead staff and management came to agreement on moving forward with a new conditional waiver, modeled in part on existing voluntary programs, with group enrollment and reporting. The conditional waiver would offer increased regulatory oversight, but would have the flexibility to build on existing proactive efforts. Staff then met informally with several agricultural and environmental groups around the region to explain what was being proposed and obtain their input. During the course of several meetings, it became apparent that both the agricultural and environmental interests had legitimate concerns that were not likely to be addressed through the Regional Board's usual regulatory process. Staff

then proposed to several groups that it might be worthwhile to have the parties work together. There was considerable support for the idea.

# **Agricultural Advisory Panel**

In February 2003, staff convened an advisory of agricultural and environmental representatives from across the Region. Staff's intent was to have a panel that represented most of the major agricultural interests as well as key environmental organizations. Originally, the size was to be 8 to 10, but it soon became apparent that more agricultural representatives were needed to accommodate several counties and many organizations. Although some panel members changed through the course of the year, all original organizations continued to be represented. Participant numbers were usually about 20. Participating organizations included the Ocean Conservancy, the Central Coast Coalition of County Farm Bureaus, Monterey County Farm Bureau, Jefferson Farms, Santa Cruz County Farm Bureau, San Benito County Farm Bureau, the Environmental Center of San Luis Obispo (ECOSLO), the Environmental Defense Center, Monterey Bay National Marine Sanctuary, the Agricultural Land-Based Training Association (ALBA), the Central Coast Winegrowers Association, San Luis Obispo County Farm Bureau and Cattlemen's Association, Santa Barbara County Farm Bureau, Grower Shipper Vegetable Association of Santa Barbara, and Santa Barbara Channel Keeper. Several other organizations that were contacted felt that their interests were adequately represented but expressed a desire to be kept informed.

Panel meetings were conducted as facilitated discussion sessions. The group adopted ground rules and spent time hearing about the interests and concerns of each of the participants. The panel heard concerns about fertilizers and pesticides getting into streams and concerns about the costs of a program and agriculture's inability to pass costs along to consumers. In this way, a foundation of understanding was built that allowed the participants to discuss ideas and propose solutions in a respectful environment. At the second meeting, the panel agreed on a mission statement, which reads, "The goal of the panel is to assist staff in developing

recommendations to the Regional Board for a replacement to the expired waivers that will be protective of water quality, the viability of Central Coast agriculture, and comply with state law."

#### **Panel Recommendations**

All panel recommendations were developed by consensus. Where the panel did not have consensus, the proposed recommendation was included in the panel's recommendations to staff. The panel considered the requirements of the law, each party's interests and existing agricultural efforts to protect water quality. The panel discussed what was being done by agriculture to implement the Sanctuary Plan for Agriculture, such as hiring Farm Bureau coordinators who were helping to organize groups of growers in watersheds, arranging for UCCE Farm Water Quality short courses and compiling reports on working group activities.

The panel reached agreement on the education and farm water quality plan development requirements, management practice implementation and reporting through a checklist format, and the tiered structure of the waivers, which offer reduced reporting for those meeting all requirements by the enrollment deadline. The panel also recommended that monitoring focus on currently applied agricultural constituents, make use of existing monitoring resources wherever possible, and be structured on a cooperative basis rather than on individual discharge monitoring.

There were a number of issues where the panel did not develop a consensus on recommendations, including how to address groundwater and stormwater issues, and the details of a cooperative monitoring program. In many ways, these are the most difficult issues the panel faced, and several meetings were devoted to exploring them.

Discharges to groundwater are included in the waiver because of Region 3 Basin Plan requirements and because of widespread and well-documented nitrate contamination in groundwater basins underlying agricultural areas

throughout the region. Staff is not proposing to require groundwater monitoring, but the waiver requires dischargers to identify practices that will protect groundwater as well as surface water.

Stormwater discharges were covered under the original 1983 waivers. New requirements were developed by staff with input from technical service providers. Several comment letters expressed concern with the language about stormwater discharges. The waiver does not mandate containment of stormwater and the language in the order has been revised to clarify that point.

Staff proposed a cooperative monitoring approach as a way to meet regulatory requirements without the overwhelming financial burden of individual monitoring. developed the program based on the experience of managing the CCAMP program, input from academic researchers, and review of other monitoring programs. Considerable discussion revolved around the need for expensive toxicity and the frequency of monthly testing conventional sampling. The program was designed to assess both water quality and beneficial use support, which staff believes is necessary in order to determine effectiveness of the waiver. Staff examined variability of various key parameters in the CCAMP database to evaluate needed sampling frequency; monthly sampling requirements for conventional water quality were based on the need to document improvement within the five to ten years staff anticipates will be needed to substantially improve water quality.

### PROPOSED WAIVER

The Regional Board proposes to adopt a conditional waiver of waste discharge requirements and a waiver of the requirement to submit a report of waste discharge for discharges of waste from irrigated lands. Irrigated lands are lands where water is applied for producing commercial crops and, for the purpose of this program, include, but are not limited to, land planted to row, vineyard, field and tree crops as well as commercial nurseries, nursery stock production and greenhouse

operations with soil floors that are not currently operating under Waste Discharge Requirements (WDRs). Fully contained greenhouse operations (those that have no groundwater discharge due to impervious floors) are not covered under this Conditional Waiver and must either eliminate all surface water discharges or apply for Waste Discharge Requirements. Lands that are planted to commercial crops that are not yet marketable, such as vineyards and tree crops, must also obtain coverage under this Conditional Waiver.

Discharges include surface discharges (also known as irrigation return flows or tailwater), subsurface drainage generated by installing drainage systems to lower the water table below irrigated lands (also known as tile drains), discharges to groundwater, and storm water runoff flowing from irrigated lands. These discharges can contain wastes that could affect the quality of waters of the state.

Discharger means the owner and/or operator of irrigated cropland on or from which waste is discharged that affects or could affect the quality of waters of the state.

### **Tiered Waiver Structure**

Two categories of conditional waivers are proposed, in acknowledgement that a significant number of farmers in the Central Coast Region have already begun to actively address water quality protection by obtaining water quality education, developing farm plans or completing practice assessment tools, and changing their practices to protect and improve water quality.

Tier 1 (five-year) waivers are intended for those dischargers that have already completed a minimum of fifteen hours of farm water quality training, have completed farm water quality plans, and have begun the process of implementing management practices to protect water quality. Tier 1 waivers are valid for five years or the length of time remaining in the five-year waiver cycle.

Tier 2 (one-year) waivers are intended for those dischargers that cannot meet all requirements of Tier 1 by the enrollment deadline of December 1, 2004. Tier 2 waivers are renewable annually for a maximum of three years. A discharger may move from Tier 2 to Tier 1 at any time during the three year period. Tier 2 dischargers that have not met all requirements for a Tier 1 waiver by the end of three years may be

required to apply for waste discharge requirements unless they can demonstrate progress toward meeting Tier 1 requirements as well as extenuating circumstances, such as lack of available training classes, that prevented them from meeting all requirements within the allotted time period.

Tiered conditional waivers will provide increased regulatory oversight and focus attention on those dischargers that have not begun to address water quality issues, while allowing those dischargers that are already working toward full compliance with water quality objectives to devote their time and resources to implementing management practices. The time schedule will allow a limited amount of time to meet requirements for education and planning, and allow time for implementation and adjustment of management practices. Dischargers will report current and planned management practice implementation upon enrollment and during the five-year waiver cycle through annual or biennial Waste discharge requirements and enforcement will be reserved for non-compliant dischargers, or if water quality does not improve. Draft Order R3-2004-0XYZ, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands is included as Attachment 3.

# PROGRAM IMPLEMENTATION AND ENFORCEMENT

# <u>Compliance with the State's Policy for</u> <u>Implementation and Enforcement of the</u> <u>Nonpoint Source Pollution Control Program</u>

The new *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Policy) will require any program adopted to address NPS pollution to contain five key elements, as described below. Although the NPS Policy will not take effect until the Office of Administrative Law approves it, Regional Board staff provides the following information in an effort to meet the informational policies of the NPS Policy.

Element 1: The goal and purpose of the conditional waiver program is to achieve and maintain water quality objectives and beneficial uses of the state's waters, including antidegradation where applicable. Staff recognizes that meeting this goal is a long-term effort, and cannot be achieved during the five-year waiver cycle. Goals of the conditional waiver program during the next

five years are to ensure that all farm operations are actively protecting water quality, that progress toward achieving water quality objectives is made, and that beneficial uses of water are protected or restored in compliance with the policies of the Porter-Cologne Water Quality Control Act.

Element 2: Management practices to be implemented by irrigated agricultural operations include practices aimed at improving irrigation efficiency, managing nutrients and pesticides effectively, and improving erosion control. Within each of these categories, growers may choose from a substantial number of management practices. Typical management practices include cover crops, buffer strips, filter strips, grassed roadways and ditches, sediment detention basins, water and soil nitrate testing, fertilizer placement and timing, irrigation method and efficiency. irrigation timing based on crop needs, recycling of irrigation water, pest population monitoring and use of thresholds, and many others. Farm plans will identify currently implemented practices and what is being planned.

The water quality education requirement ensures that growers will have up-to-date information on the most effective practices and will be able to choose the best combination of practices for their particular operation.

Element 3: Time schedule and milestones are an essential part of the program. Although the Regional Board's goal is 100% compliance with the conditions of the program, staff recognizes that this is unlikely to occur immediately for a variety of reasons. Staff will focus considerable effort on outreach during the first six months after the waiver's adoption, to ensure that both landowners and operators are aware of new requirements. A database is being compiled which includes both pesticide use reporting information and county assessors' information, to ensure that landowners and operators are being contacted. Staff intends to use the following schedule of timelines and milestones to implement the program:

January 1, 2005 – A minimum of 50% of dischargers are enrolled

July 1, 2005 – A minimum of 80% of dischargers are enrolled, and 50% are enrolled in the cooperative monitoring program

January-March 2005 – phone calls, Notice of Violation letters sent out to dischargers who have not enrolled in the program or submitted reports of waste discharge

March-July 2005 – Enforcement actions initiated against dischargers who have not enrolled in the program or submitted reports of waste discharge

July 2005 and annually thereafter – Program review before the Board

July 2006 – Management practices will be implemented on a minimum of 50% of irrigated farmlands in the region and identified through a Notice of Intent and practice checklists

July 2007 – Monitoring Program review before the Board

July 2009 – Management practices will be implemented on a minimum of 80% of irrigated farmlands within the region.

Water Quality Monitoring program data will be reviewed monthly, and a water quality report will be produced for each annual program review. In watersheds with significant impairments and developed or implemented TMDLs, staff will coordinate with TMDL schedules to set goals for attainment of water quality objectives. The program's overall goal will be to show improvements in water quality in irrigated lands through the monitoring program within five to ten

years of program implementation, and to achieve and maintain water quality objectives within TMDL schedules or within ten years of waiver program implementation.

Element 4: Feedback mechanisms are incorporated into the reporting requirements, which require submittal of management practice checklists and annual reports and water quality monitoring requirements. Oversight by the Regional Board will include review of reports and field verification and will be summarized as part of the annual program review. Dischargers will submit a Notice of Intent to obtain coverage under the waiver, along with a farm map, certificates of education and a checklist of practices. This checklist will contain a subset of potential practices available for each management measure, to allow Regional Board to assess overall implementation of practices in The intent is not to maintain an an area. exhaustive inventory of all practices, or to require ever-increasing management practices for each farm, but rather to obtain an overall picture of what practices are being implemented to address each of the management measures. Dischargers will keep more extensive records on-site as part of their farm plans, which will be available for staff to review during a site visit if requested.

Dischargers will enroll in one of two tiers depending on whether they have completed education and plan development requirements prior to enrollment. Those that have will be in Tier 1 and will only have to submit one additional checklist during the 5-year waiver cycle. Other dischargers who are still working to complete education and plan development requirements will have to report progress as well as submit a practice checklist annually.

Information in the enrollment and subsequent submittals will be used to assess management practice implementation, with the understanding that choosing an effective combination of management practices is a dynamic process.

Element 5: <u>Consequences of failure</u> to achieve program milestones will be reconsideration of the program structure and conditions, consideration of issuance of individual or general waste discharge

requirements and increased focus on enforcement. Annual program review will allow for adjustment of staff effort, reallocation of staff resources and public input; the five year review at the end of the first waiver cycle will allow for revision of conditions as needed, consideration of monitoring program effectiveness, and extensive public review of the entire program. If necessary, the waiver can also be revised or terminated within the next five years.

### **ENFORCEMENT**

### **Role of Enforcement**

Enforcement is only one tool in water quality protection<sup>1</sup>, and will be used to ensure that dischargers are meeting performance requirements, that is, enrolling, developing plans, implementing management practices and meeting monitoring and reporting requirements. Staff intend to initiate few if any enforcement actions based solely on water quality data during the first waiver cycle, unless there is clear evidence of flagrant or deliberate impacts to water quality. The focus of enforcement effort will be on those who, after being informed of requirements, fail to enroll and/or fail to make an adequate attempt to meet their education, plan development or reporting responsibilities; monitoring and however, other enforcement actions may be taken as appropriate for specific operations. Regional Board will utilize enforcement techniques to obtain compliance using the lowest level of enforcement tool (e.g., phone call, Notice of Violation letter) that effectively achieves the program's goals. (See, State Water Resources Control Board's Water *Ouality Enforcement Policy*, Section I.D.)

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# **Enforcement Tools and Staffing Resources**

Concern and/or skepticism has been expressed about the ability of the Regional Board to implement this conditional waiver program. While it is true that staff resources are limited. sufficient resources will be available for fiscal vear 04/05 to devote three to four staff exclusively to performing waiver tasks, including outreach, oversight, data management and Staff recognizes that although enforcement. many in the agricultural community have been and will continue to make a good faith effort to protect water quality, and will do their best to comply with conditions, there are others who believe they will not have to participate. Staff will use all the enforcement options available to ensure that such dischargers are not allowed to violate the law. Tools will include Notices of Violation, which allow dischargers to enroll within a specified time period, Administrative Civil Liability (fines), and Cease and Desist Orders or Time Schedule Orders. In the most egregious cases, the Regional Board can consider seeking judicial enforcement. Where the waiver is not an appropriate regulatory tool for a particular facility, the Regional Board will require a report of waste discharge and issue waste discharge requirements. Cleanup and Abatement Orders may be appropriate where past discharges are susceptible to cleanup. Obviously, four staff cannot develop enforcement actions against hundreds of dischargers immediately if large numbers refuse to comply, but in appropriate cases the Regional Board can assess civil liability retroactively for every day a discharger is out of compliance with the law. If enforcement actions prove necessary, staff can maximize resources by targeting enforcement efforts where they will have the greatest deterrent effect on similar violators.

When the Regional Board does undertake enforcement actions, its discretion in setting the liability amount is limited by statutory factors. The Regional Board must balance these factors: the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the discharger, the ability to pay, the effect on

<sup>&</sup>lt;sup>1</sup> Other tools include education, outreach and funding. In order to develop a successful agricultural program, Regional Board staff intends to focus their efforts on education and outreach so that widespread enforcement actions will become unnecessary. These educational efforts will include providing assistance to entities eligible to apply for grants to fund monitoring or management practice development. Some grants will be available from Regional Board SEP or settlement funds, as well as the State Water Resources Control Board's Agricultural Water Quality Grants Program.

ability to continue in business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters as justice may require. Any discharger subject to an administrative liability action has the right to a public hearing, and may petition the Regional Board's order to the State Board.

Regional Board staff intends to use education and outreach before bringing an enforcement action where a discharger demonstrates that a failure to enroll resulted from lack of information or language barriers. However, every person is presumed to know the law, so it will be imperative that the agricultural community, including Farm Bureaus, watershed coordinators, technical assistance agencies and other entities assist with educational efforts.

# **Use of Monitoring Data**

The intent of the Monitoring and Reporting Program is to provide a tool that the Regional Board and agricultural operations can use to develop the most effective suite of management practices, assess the effectiveness of those practices, track improvements in existing water quality and target areas where more work is needed. Water Code section 13269 requires the monitoring program to demonstrate the effectiveness of waiver conditions. The ultimate goal of the conditional waiver program is to ensure that water quality standards are being met and that irrigated agriculture is not contributing to water quality impairment. The monitoring program is designed to assess this at a reasonable cost and over a relatively long period of time. The program is designed to look for improvement in water quality in waters that have been identified as impacted by agriculture, as well as ensure that existing good water quality in other areas is not degraded by irrigated agriculture. In some watersheds water quality standards will only be achievable when other discharges are also addressed; in others, addressing agricultural impacts will result in attainment of water quality However, this will not happen standards. overnight. Therefore, monitoring data must be used in conjunction with information about compliance with performance standards in an attempt to fully understand and address the causes of water quality impairment.

# **Enforcement in Areas Where Groundwater is Already Degraded**

As noted above, the agricultural program is intended to address water quality problems over a period of time. Degradation of certain surface and ground waters did not occur overnight, and addressing those problems will not occur overnight, either. In adopting the May 2004 NPS Policy, the State Board recognized that it may take time to achieve water quality requirements. (NPS Policy, p. 14.) This is such a case. An area of particular concern to farm operators is potential liability for existing high nitrate levels in groundwater. The intent of the program during the first five-year cycle is for operators to develop management practices that prevent additional degradation of groundwater and result in gradual improvements. Appropriate practices may include applying less fertilizer where irrigation water is already high in nitrates and other application efficiency measures.

The draft Monitoring and Reporting Program does not require groundwater testing yet. From a practical standpoint, this means that limited information would be available on which the Regional Board could base an enforcement action for groundwater discharges. Where groundwater data is available, Regional Board staff intends to use the information to assess and develop management practices and inform area growers, rather than for enforcement actions. isolated cases may warrant a different approach, but those cases would be likely to involve operations that fail to implement management practices. During the first five-year cycle, the focus will be on development of management practices that protect groundwater, rather than on enforcement actions. Where the Regional Board does undertake enforcement actions, it must consider the factors described above in setting the amount of liability.

## PROPOSED MONITORING PROGRAM

### **Water Quality Monitoring**

Water quality monitoring to determine the adequacy and effectiveness of the waiver conditions is required by CWC Section 13269. Dischargers will be required to elect a monitoring option during enrollment. They may choose individual monitoring or join a cooperative agricultural water quality monitoring program. The cooperative monitoring program will focus on currently applied agricultural constituents and is designed to provide information on in-stream water quality and to detect trends over time. The cooperative monitoring option is proposed as an efficient way to determine the effectiveness of the waiver program at a reasonable cost, as well as to manage large amounts of monitoring data and ensure data quality.

Cooperative monitoring represents a watershedbased approach to meeting monitoring requirements, but recognizes that most watersheds have mixed land uses and other discharges besides irrigated agriculture. For that reason, the focus of monitoring is on currently used agricultural constituents and toxicity, with provision for followup monitoring when problems are identified. Monitoring from on-going programs may be used to satisfy monitoring requirements and further delineate problems. Where necessary, the Regional Board will use its regulatory authority to require water quality information from other potential sources. Fifty sites will be selected throughout the agricultural areas of the region, on main stems of rivers and on tributaries entering the rivers. These sites will be monitored on a regular basis, to see whether implementation of management practices as the result of adoption of the waiver is improving water quality. Sites will be selected in areas where the Regional Board's Central Coast Ambient Monitoring Program and other data have identified water quality problems from nutrients and other constituents that are likely attributable to irrigated agriculture. The cooperative monitoring program allows dischargers to pool resources in order to accomplish required monitoring at a lower cost than individual monitoring.

Broad objectives of the cooperative monitoring program are to:

### **Short Term Objectives**

• Assess status of water quality and associated beneficial uses in agricultural areas

- Identify problem areas associated with agricultural activities, where Basin Plan objectives are not met or where beneficial uses are impaired
- Conduct focused monitoring to further characterize problem areas and to better understand sources of impairment.
- Provide feedback to growers in problem areas; require additional monitoring and reporting as necessary to address problems

# **Long Term Objective**

- Track changes in water quality and beneficial use support over time.
- Verify the adequacy and effectiveness of the waiver's conditions.

The proposed draft Monitoring and Reporting Program R3-2004-0117 is included as Attachment 4. Estimated costs under various monitoring scenarios are included in Attachment 5. Attachment 5 represents staff's estimates of what participation in a cooperative monitoring plan might cost; however, the actual costs for participating in a cooperative monitoring program are within the sole control of the participants. Grant funding can significantly reduce these costs. if the participants choose to apply for such grants. The Regional Board recognizes that this is a new, although not unprecedented, approach to satisfying the need for water quality information. In other parts of the state, dischargers have banded together and pooled resources to improve data quality. provide a broader perspective of water quality condition, and lower individual costs. recommends that the program be set up by a nonprofit organization selected or formed by the agricultural community that has the ability to apply for newly available Agricultural Water Quality Grant Program funds. These funds allow nonprofit organizations and local public agencies to receive funds for monitoring and implementation of projects targeting irrigated agriculture and waiver These funds, along with other compliance. potential funding sources such as the PG&E and Guadalupe settlement funds, would greatly leverage growers' resources and allow establishment of the cooperative monitoring program for one or two years at a minimal cost to growers. This would allow additional time to formulate a cost allocation process and evaluate the cooperative monitoring program.

# PROGRAM IMPLEMENTATION RESOURCES

Successfully implementing a program with 2500 potential enrollees will necessitate reordering priorities and redirecting staff effort from lower priority tasks. Some tasks that have been completed in the past will no longer be done, or will not be done to the same level as before. Staff estimates that four full time staff as well as student help and contract assistance for database development will be needed for fiscal year 04/05 in order to complete the following tasks:

# **Data Management**

In order to ensure that all owners and operators of irrigated lands are aware of the new conditional waiver, a comprehensive mailing list will be created using both pesticide use reporting and county assessors' information. In addition, a database will be developed and linked to the Regional Board's website to enable on-line enrollment. The database will track submittals (Notice of Intent, management practice checklists, annual reports, monitoring data, etc.) Hardcopy data will also be entered into the database. Staff has developed a prototype of the database and is pursuing contract resources with State Board and USEPA. This effort may fit well with a statewide effort to track NPS Management Measures.

### **Outreach and Education**

During the six months between adoption of the Conditional Waiver and the enrollment deadline, staff effort will be focused on ensuring that all potential enrollees are informed about upcoming requirements. Staff will distribute information through individual mailings, through the Regional Board's website, through coordination with Agricultural Commissioners, Resource Conservation Districts, University of California Cooperative Extension and other partners, and through presentations at industry meetings and short courses.

#### **Oversight and Enforcement**

Once enrollment has begun, staff effort will shift to enrollment review, ensuring compliance through reviewing submittals, notifications, site visits, and, where necessary, initiating enforcement activities. Although the primary intent of the program is to ensure implementation of water quality protection practices by agriculture, compliance with all conditions of the waiver are important and staff will work to ensure that all dischargers are enrolled, receiving education, developing farm plans and implementing practices.

In the short term, staffing resources will come from 1.2 PY (person-year) of existing NPS staff resources, 0.6 PY of Watershed Management Initiative (WMI) resources, 1.2 PY of BCP 81 resources and additional grant/contracting resources devoted exclusively to Agricultural Waiver implementation for fiscal year 04/05. NPS and WMI staff resources currently directed more generally to outreach and education and watershed management will be focused on waiver compliance activities. TMDL implementation activities funded by BCP 81 will focus on TMDLs that have agriculture as a primary source and staff will work to ensure compliance with waiver conditions. In addition, staff is proposing that a new position be added that will be devoted entirely to waiver program implementation.

In the longer term, additional resources may become available once a waiver fee schedule is adopted by the State Water Resources Control Board. Staff suggests that at least 5 of the 22 PYs being suggested for waiver implementation statewide be devoted to implementing Region 3's agricultural waiver program. Such additional resources will further ensure the long-term success of the waiver program.

# REGIONAL BOARD SUPPORT FOR MANAGEMENT PRACTICE IMPLEMENTATION AND AGRICULTURAL MONITORING

Staff proposes several ways that the Regional Board can support agricultural compliance with the Conditional Waiver:

### **Grant Funds**

At least 75% of all grant proposal recommendations for the next 3-5 fiscal years should be directly related to implementing management practices or monitoring activities required by the Conditional Waiver. Although all fund sources are not amenable to such an approach, the Regional Board should prioritize agricultural projects that are directly related to the Conditional Waiver over other types of projects, however desirable. Contract management requires staff time, which is very limited. Staff currently participates on the

Agricultural Grants Workgroup, which is developing guidelines and a Request for Proposals for agricultural projects funded by Proposition 40 and 50. Projects that assist farmers in meeting waiver requirements, including monitoring, will be prioritized.

#### **Settlement Funds**

Settlement funds are another resource that could potentially be used to support establishment of the Cooperative Monitoring Program. Existing PG&E Settlement Funds that are available to support monitoring of agricultural practices in the lower Salinas and Elkhorn Slough areas, and Guadalupe settlement funds that are available in the southern part of the Region could support monitoring at sites in those respective areas that are part of the waiver monitoring network. Settlement funds may also be used as match to leverage upcoming Agricultural Water Quality Grant program funds that provide for implementation and monitoring in agricultural areas, thus reducing initial costs of starting up the cooperative monitoring program. Under the grant program, management practice implementation by farmers to implement the waiver can qualify as match for funds to implement the monitoring program.

# **RESPONSE TO COMMENTS**

A large number of comment letters were received in response to the workshops and the Initial Study and Negative Declaration prepared under CEQA. Staff's response to comments received on the CEQA documents and the proposed Conditional Waiver and proposed Monitoring and Reporting Program are included as Attachment 6.

# **ATTACHMENTS**

- Revised Initial Study and Negative Declaration for Conditional Waiver of Waste Discharges from Irrigated Lands
- 2. Resolution R3-2004-0118 Adopting the Negative Declaration
- 3. Order R3-2004-0117, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands
- 4. Monitoring and Reporting Program R3-2004-0117
- 5. Anticipated cooperative monitoring costs under four scenarios
- 6. Response to comments

7. Comment letters

#### RECOMMENDATION

Staff recommends that the Regional Board approve Resolution R3-2004-0118 adopting the Negative Declaration; adopt Order R3-2004-0117, Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands; and adopt Monitoring and Reporting Program R3-2004-0117.

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